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# Towards Distributed Citizen Participation

*Lessons from WikiLeaks and the Queensland Floods*

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**Abstract:** *This paper examines the rapid and ad hoc development and interactions of participative citizen communities during acute events, using the examples of the 2011 floods in Queensland, Australia, and the global controversy surrounding WikiLeaks and its spokesman, Julian Assange. The self-organising community responses to such events which can be observed in these cases bypass or leapfrog, at least temporarily, most organisational or administrative hurdles which may otherwise frustrate the establishment of online communities; they fast-track the processes of community development and structuration. By understanding them as a form of rapid prototyping, e-democracy initiatives can draw important lessons from observing the community activities around such acute events.*

**Keywords:** participation, e-democracy, acute events, Queensland floods, WikiLeaks

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**T**here are many possible definitions of 'e-democracy', to the point that the term is perhaps suffering from its misapplication to cases where it simply describes the provision of services by governments to citizens via online media. For the purposes of this article, we utilise a broad definition of e-democracy as the active participation of citizens in the public discussion and deliberation of matters of public concern and policy, and in the organisation of communal activities and initiatives to address such matters, through the use of online, digital media.

This definition inherently highlights the importance of *active participation* – meaning not simply access to information, but direct and productive engagement with it, in turn generating material (ideas, comments, contributions) which may again be shared with other participants using the same or additional online media spaces. The quality of such active participation in e-democracy, much like the quality of active user participation in any other online space, depends on the sustained presence of a substantial community of users (and the sustainability of their presence for these users, in the face of other personal and professional demands on their time which they may experience in their everyday lives).

Studies of online communities (e.g. Bruns, 2008; Baym, 2000), and indeed of communities in general (e.g. Hebdige, 1979) have demonstrated that one key prerequisite for the establishment and sustainability of functioning communities is the development of a balance between a shared purpose – a common community credo which all members of the community can subscribe to at least to some extent – and a sufficient diversity of ideas and opinions within the community – to generate new and unexpected impulses and thus save the community from developing a predictable, stifling tendency to follow a common 'groupthink' pattern. This requirement also has direct implications for the structure of the community itself: though it is common that from ongoing processes of participation, key members will emerge from the community, bestowed with greater social capital and higher levels of authority than rank-and-file participants, these community leaders

must not be allowed to establish positions of such unassailable authority that they are placed in a position to *determine* 'groupthink' and direct the course of discussion within the community – that is, to encourage the operation of what Noelle-Neumann (1974) has called a "spiral of silence" which effectively shuts down the expression of dissenting views.

Instead, the participant community must remain permeable for new members who are prepared to contribute constructively to continuing deliberative processes, and must hold the promise that through sustained participation such new members, too, will be able to accumulate social capital and advance to positions of authority within the community. Indeed, such promise of community recognition, and the aspects of competition with other participants which are associated with it, can – as long as such competition is not allowed to supplant topical discussion as the principal driver of participation in the community – act as a significant incentive for members to contribute to the community activities (also see Bruns, 2009).

These interrelated dynamics of communal discussion and personal status are clearly internal to the community itself, regardless of whether that community exists as an offline association of individuals or an online group of users, or both; any technological support structures for the community, for example in the form of dedicated online discussion and collaboration spaces for community members, can only aim to guide and support such internal processes (or at the very least, to avoid stifling or counteracting them), not to create them from scratch. This is an important point especially also for community building projects within the e-democracy field: the ultimate aim of such projects should usually be to enable self-determined, self-directed, and above all self-motivated communities to manifest themselves, rather to develop spaces where any sense of shared purpose (and thus, of community itself) remains dependent on the artificial interventions of project staff. From a practical perspective, not least also considering the inherent vagaries of funding and staffing for e-democracy activities, projects whose participant communities do not develop their internal momentum to the point that they become self-sustaining are likely to fail – and the long list of defunct projects in this area is a clear indication of how difficult such continuous momentum is to achieve.

These difficulties are also closely associated with the problems of ownership which such projects will face. While potentially afforded a more direct connection with policymakers, e-democracy projects operated by government departments and institutions may be subject to tight operational controls and governance regulations, substantially limiting the degree of freedom of self-determination which can be provided to the participant community; by contrast, projects operated by independent civil society organisations may benefit from a substantially greater operational freedom, but conversely their relative lack of accountability to recognised authorities also enables official stakeholders to more easily dismiss their outcomes as partisan and non-representative.

Bruns & Swift (2010) have suggested that this "atmosphere of crisis [that] surrounds virtual deliberation and indirect representation in the early 21st century" (Coleman, 2005a, p. 195), which results from the limitations of both government-to-citizen (g2c) and citizen-to-citizen (c2c) models, may be able to be addressed at least in part by exploring hybrid solutions which seek government support *for* (and participation *in*) citizen-to-citizen spaces – a g4c2c model whose arms'-length government involvement mirrors to some extent the hands-off government support for public service broadcasting in many developed nations. Indeed, applying the PSB model to e-democracy more literally, in 2001 Blumler & Coleman called for the establishment of a 'Civic Commons', operated as a public-held institution in analogy to the BBC:

*"Our proposal for a civic commons in cyberspace aims to create an enduring structure which could realise more fully the democratic potential of the new interactive media. This would involve the establishment of an entirely new kind of public agency, designed to forge fresh links between communication and politics and to connect the voice of the people more meaningfully to the daily activities of democratic institutions. The organisation would be publicly funded but be independent from government. It would be responsible for eliciting, gathering, and coordinating citizens' deliberations upon and reactions to problems faced and*

*proposals issued by public bodies (ranging from local councils to parliaments and government departments), which would then be expected to react formally to whatever emerges from the public discussion. This should encourage politicians and officials to view the stimulation of increased participation not as mere 'citizens' playgrounds' but as forums in which they must play a serious part."* (2001, p. 15)

However, such earlier calls for the development of a stand-alone public agency for e-democracy may have been overly influenced by the early-2000s, pre-Web 2.0 enthusiasm for building new online platforms. The proliferation of e-democracy platforms (driven in part by the various competing funding schemes for online projects which are available to civil society organisations, academic researchers, Web developers, and government agencies) may also have resulted in a dilution of existing public enthusiasm for participating in such spaces, and thus diminishes these communities' chances of success, as it has become increasingly difficult to predict which of the many projects in existence today will remain in active operation in the longer term – beyond the initial startup publicity. The challenge for many of these platforms is not to generate engagement during their first few days and weeks of operation, but to *maintain* such engagement at sufficient levels for the longer term.

At the same time, this still-prevalent 'roll your own' mentality also obscures the fact that there are a number of very well-established, long-term sustainable spaces for online community participation which have as yet been under-utilised for e-democracy purposes – from thematic sites such as *Wikipedia*, *Flickr*, and *YouTube* to generic social media sites like *Twitter* and *Facebook*. While public broadcasters and similar government-authorised but independently-run organisations may play an important role as facilitators of g4c2c engagement processes, therefore, they may need to do so through their activities on extant social media platforms rather than only through their own Websites. Updating their 2001 'Civic Commons' vision to a Web 2.0-compatible model, Coleman & Blumler therefore describe this 'Civic Commons 2.0' as "a space of intersecting networks, pulled together through the agency of a democratically connecting institution" (2009, p. 182). What such proposals aim at, then, is the development of modes of citizen participation that are distributed – yet nonetheless also *coordinated* – across the various Web 2.0 platforms which citizens are already using, rather than centralised in a purpose-built environment that potential users would first need to sign up to.

## 1. Acute Events and Social Media

Just how this 'space of intersecting networks' might be structured in practice still remains unclear from this overall discussion, however – and indeed, in practice the answers to that question may be as diverse as the potential issues and topics which such Civic Commons 2.0 spaces may aim to address. However, recent events provide a number of highly instructive pointers to possible configurations of the Civic Commons 2.0 space – in particular, a class of events which might be best described as 'acute events' (Burgess, 2010): crises and other rapidly developing events which generate a substantial level of ad hoc community engagement in online environments.

From a research perspective, the rapidity with which such events – and their online responses – develop has the benefit of bypassing or leapfrogging, at least temporarily, most organisational or administrative hurdles which may otherwise frustrate the establishment of online communities, and of fast-tracking the processes of community development and structuration; within hours or days, large communities with complex internal structures that extend across a range of intersecting online platforms and draw on a variety of technological tools can be established. Such communities are largely self-organising, exhibit substantial levels of participant engagement, and may generate significant outcomes in terms of ideas and information; their development can be understood as a process of rapid prototyping as various members of the community take the initiative to explore the use of new tools for gathering, compiling, processing, and sharing the information that is circulating within the community – those tools which are found to be useful to the greater community are

retained and developed further, while those which do not meet significant acceptance are quietly discarded again.

E-democracy initiatives may benefit from observing community responses to such acute events in a number of ways, then. On the one hand, what technological tools and organisational processes are found to be useful and valuable there may also be able to be adopted and adapted to these initiatives' own needs; similarly, the participation and conduct of official actors as part of the wider community can be critically reviewed, and may provide insight for the further fine-tuning of the social media engagement strategies that are in use in such institutions; finally, some e-democracy projects may even be able to structure their overall operations around a series of scheduled 'acute events' (for example highlighting particular themes and topics) that attract specific groups of participants, rather than simply providing an open-ended space for discussion and deliberation that is functional but provides its potential users with little reason for why they should address any one specific topic at any one given time.

With these intentions, then, the following discussion will examine two recent acute events: the 2010/11 Queensland flood crisis, and the (continuing) controversy around *WikiLeaks* and its founder and spokesman, Julian Assange. Clearly, these events differ in a number of key elements – underlying themes, geographic reach, temporal dynamics, the involvement of government agencies and other institutions, etc. –, but both provide vital pointers for e-democracy projects.

### 1.1. The Queensland Floods

The Australian state of Queensland received an unprecedented amount of rainfall during December 2010 and January 2011, resulting in widespread flooding across large areas – a flood emergency was declared for half of the Queensland territory, with an area the size of France and Germany combined estimated to be under water. Additionally, while early flooding occurred in the relatively sparsely populated west of the state, later floods affected larger regional populations centres like Rockhampton, on the central Queensland coast, and further heavy rain finally caused widespread flooding in the state's southeast corner, where major towns Toowoomba, Ipswich, and finally the state capital Brisbane were severely affected. Arguably, the flood peak in Brisbane, in the early hours of 13 January 2011, also marks the peak of the overall flood crisis in Queensland; in Brisbane alone, some 30,000 properties were at least partially inundated by floodwaters.

As a major environmental crisis, the floods were of course covered extensively by the Australian and international mainstream media. Especially as they began to affect major population centres, however, social media such as *Facebook* and *Twitter*, as well as content sharing sites *Flickr* and *YouTube* which were used by many locals to distribute first-hand footage of the situation in their local areas, also began to play an important role. In this, the southeast Queensland flood events must perhaps be considered separately from the wider inundation of other parts of the state, as events here developed a somewhat more urgent dynamic: while flooding in central Queensland followed a familiar pattern of relatively gradual river level rises which – while nonetheless devastating for affected residents and businesses – usually leave sufficient time for warnings and evacuations, a number of southeast Queensland towns, starting with the regional centre of Toowoomba, experienced rapid and devastating flash flooding which caused small creeks to swell to raging torrents within minutes, carrying off cars and even some buildings without warning. Here, following a pattern established in other unforeseen disaster events, social media played an important role in capturing and disseminating first-hand footage of the flash floods, in effect operating as an unofficial, distributed early warning system; later, social media users also shared further links to mainstream news reports and footage of the destruction caused by the same torrent in the Lockyer Valley below Toowoomba. The floodwaters washing through the area made their way to the downstream cities of Ipswich and Brisbane over the following 48 hours.

As these initial reports of devastation heightened flood fears in Ipswich and Brisbane, social media became an increasingly important element of the flood mobilisation efforts. On *Twitter*, the #qldfloods hashtag rapidly emerged as a central mechanism for coordinating discussion and

information exchange related to the floods (hashtags are appended to tweets in order to make them more easily findable for other users, and many *Twitter* client applications provide the functionality to automatically receive all messages using a specific hashtag); while other hashtags such as #bneflooding (for information specifically relating to the *Brisbane* aspects of the overall Queensland flood crisis) or, with characteristic Australian humour in the face of adversity, #thebigwet were also used by some participants, they were unable to establish themselves as equally prominent alternatives – most likely indicating that *Twitter* users were concerned to avoid any fracturing of the discussion into several disconnected subsets.

Notably, too, the *Twitter* accounts of several official sources quickly adopted the #qldflooding hashtag for their own tweets. Indeed, the social media use of several of these organisations underwent a rapid development process as the emergency unfolded; this is best illustrated using the example of the official *Facebook* and *Twitter* accounts of the Queensland Police Service (QPS). (For a detailed discussion of the @QPSmedia account and its participation in the #qldflooding hashtag discussion, also see the major report published by the ARC Centre of Excellence for Creative Industries and Innovation: Bruns *et al.*, 2012.)

Initially, QPS had mainly shared its own advisories and news updates through its *Facebook* page, with messages automatically crossposted to *Twitter*. This was problematic for a number of reasons, however: first, the lower 140 character limit for messages on *Twitter*, compared to *Facebook*, caused several of these crossposted messages to be truncated and thus unusable (especially when embedded hyperlinks were broken in the process); additionally, this also meant that users on *Twitter* may first have had to navigate from *Twitter* to *Facebook*, to see the full, original message, and then to follow any embedded links to their eventual destination; and even this may only have been possible for users who already had *Facebook* accounts. Further, for reasons of site design, *Facebook* messages are more difficult to share with a larger number of users than those on *Twitter*, where a simple click of the 'retweet' button passes on an incoming message to *all* of one's followers; and similarly, ongoing conversations are more difficult to manage on *Facebook* – where the amount of commentary attached to each of the QPS's posts was rapidly swamping important information – than on *Twitter*. Indeed, *Facebook* knows no equivalent to the concept of the hashtag, which allows a large number of users to come together as an *ad hoc* public (Bruns & Burgess, 2011) and to conduct an open, ongoing, public discussion centred around a common topic. These shortcomings were quickly (and courteously) explained to the QPS media staff by a number of vocal *Twitter* users, and the QPS used both its *Facebook* page and its @QPSmedia *Twitter* account in equal measure throughout the rest of the flood crisis; in fact, @QPSmedia received by far the most retweets and @replies from other users in the #qldflooding community during the four key days of 11 to 14 January 2011:

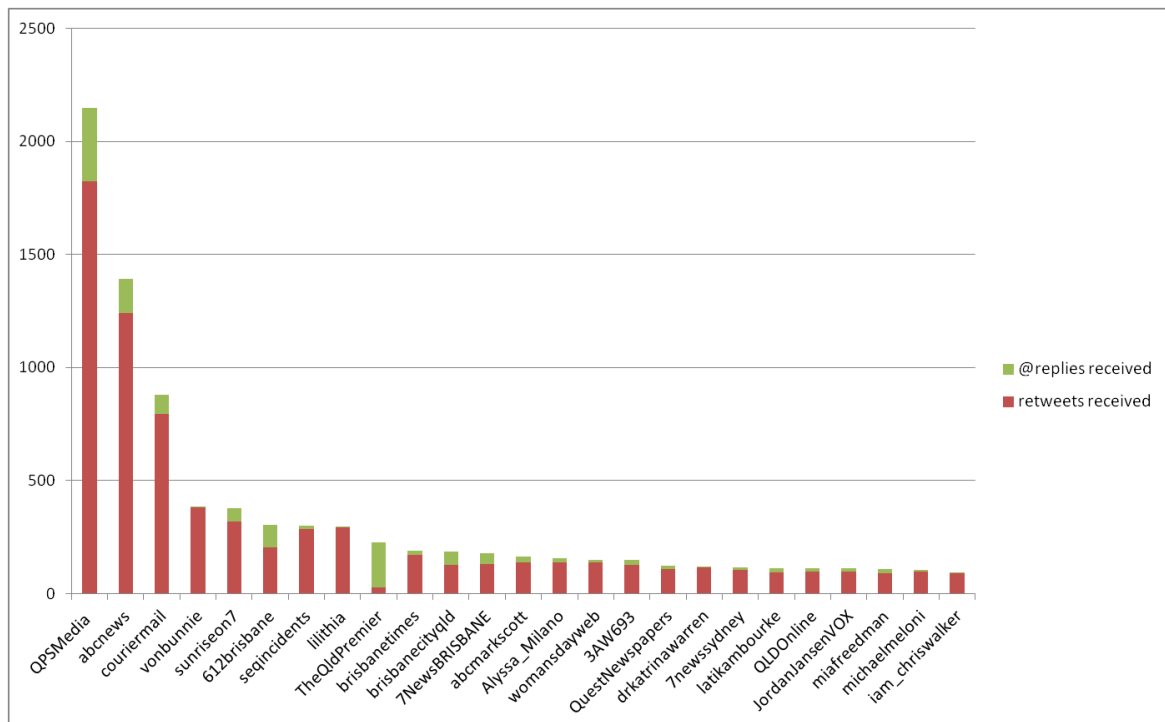


Fig. 1: @replies and retweets to #qldfloods users during 10-16 Jan. 2011

Fig. 1 also indicates the continuing importance of institutional sources during this event: in addition to @QPSmedia, other prominently featured accounts are those of the Australian Broadcasting Corporation (ABC)'s @abcnews, Brisbane newspaper @couriermail, breakfast TV show @sunriseon7, local ABC radio station @612brisbane, @TheQldPremier, Brisbane online newspaper @brisbanetimes, commercial TV news @7NewsBRISBANE, and the Brisbane City Council's @brisbanecityqld, *inter alia*. A full analysis of the nature of the responses to these institutional *Twitter* accounts is beyond the scope of this article – some @replies to news agencies may have complained about incorrect information in their coverage, for example, while other notable accounts (such as that of popstar Pink) are featured prominently here only because their general messages of support were widely retweeted by their followers – but this graph provides at least a basic overview of the distribution of attention within the overall #qldfloods community (also see Bruns, 2011).

The very substantial amount of *retweets* received by the leading accounts, however, clearly contributes to the greater visibility of these accounts' messages: a retweet of an existing message makes that tweet visible not only to the established followers of the original sender, and to the followers of the #qldfloods hashtag, but additionally also to the followers of the retweeting user. Over the course of the main week of the southeast Queensland floods, for example, the @QPSmedia account received an average of more than 25 manual retweets for each of its tweets (Bruns *et al.*, 2012); if we added up the combined number of followers of these retweeting accounts, this might result in several thousand or tens of thousand more *Twitter* users exposed to these messages. The same is true also for messages within the general #qldfloods hashtag: many hashtagged tweets were further retweeted by participating users and thereby reached additional audiences. A closer analysis of such activities reveals that retweeting is far from random, but is instead preferentially focussed on particular types of messages: as fig. 2 shows, *Twitter* users retweeted situational information, first hand-footage, and crisis advice, as well as (later in the crisis) fundraising information more frequently and enthusiastically than those tweets which expressed, for example, general sentiments of thanks, sympathy, or personal reaction (Bruns *et al.*, 2012):

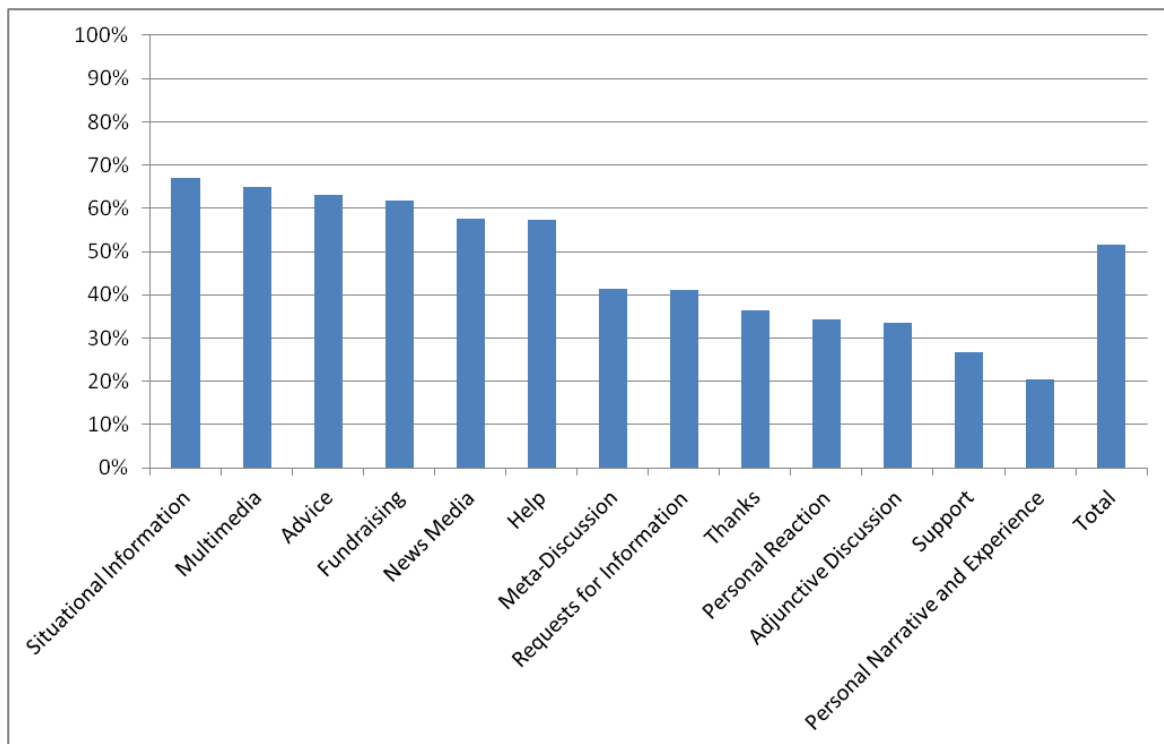


Fig. 2: Percentage of retweets amongst messages across the #qldfloods content categories

It should be noted that a number of the key *Twitter* accounts, especially again including the @QPSmedia account, were also active in responding to messages from other *Twitter* users, and/or in retweeting their messages; this reciprocity will have further cemented their position in the centre of the overall network. Additionally, some *Twitter* users also set up dedicated accounts to retweet and thus further disseminate important information (@thebigwetfeed, @qldfloodfeed), or utilised their existing accounts to retweet whatever authoritative information they found worth passing on. Anecdotally, this appeared to be the preferred activity for users who were following the flood crisis, but had no first-hand information or advice of their own to pass on; the dedicated retweet accounts also provided a means for *Twitter* users to follow a vetted subset of the flood information on *Twitter* without having to deal with the entire volume of #qldfloods messages.

Such phenomena point to the substantial level of instant community self-organisation on *Twitter* (and in other social media spaces) at the height of the crisis. Once #qldfloods had become clearly established as the central gathering mechanism for flood-related information, it began to be used to report what major roads had been closed or were still open; to call for assistance or supplies (from sandbags to medical equipment) in specific locations; to coordinate flood response activities; to point to important online resources (such as *Google Maps* of road closures or expected flood levels); and, importantly, to debunk any rumours which had begun to spread. Indeed, in addition to (and combined with) the overall #qldfloods hashtag, the Queensland Police Service also regularly posted its #Mythbuster tweets, directly addressing various rumours (from stories that Brisbane's Wivenhoe Dam had burst to suggestions that its near-critical level could be reduced by getting all Brisbane residents to turn on their taps).

On *Twitter*, hashtag functionality clearly played an important role on a number of fronts, then – both for coordinating the #qldfloods discussion overall, and for highlighting individual aspects of it. In addition to the #Mythbuster hashtag, others especially addressed specific suburbs (such as #Rosalie, #Chelmer) or connected the flood discussion with relevant other communities (e.g. by including #Auslan in a call for interpreters, to seek the attention of Australian sign language users). Rank-and-file users also took care to repost information from the authorities under additional hashtags if the original tweets had not been properly hashtagged themselves. That said, attempts



to introduce a somewhat more complicated hashtag syntax aimed to enable the automatic processing of tweets for a collaborative map of the flood situation appeared to be only marginally successful. While a number of tweets like

*#loc Gailey Road Taringa #CLOSED near 5'ways roundabout. Police presnt. #Bneffloods #qldffloods #thebigwet*

were made by #qldffloods participants, they were not particularly prominent – most likely because the absence of readily available tools (including smartphone applications) to generate this syntax meant that users would have had to memorise and manually enter these standardised codes while creating their tweets (the GPS functionality available with modern smartphones was similarly rarely used; in Australia, this is true during non-crisis periods, too).

As important as the use of *Twitter* and *Facebook* themselves during the flood events was their use for pointing to further online resources, too – with such resources including many pre-existing sites such as the Website of the Australian Bureau of Meteorology (BOM), which provides up-to-the-minute weather radar and river level observations as well as forecasts and warnings for a wide range of locations, the sites of Brisbane City Council and Queensland State Government, and the sites of major infrastructure providers (such as electricity and telephone companies). But beyond – and in addition to – such official sources, the flood event also saw the rapid establishment of a number of user-initiated online resources: some sites were set up to mirror official sites whose servers were struggling to cope with the increased amount of page requests; some pulled together the information from a variety of sources in a faster and more user-friendly format (for example by marking road closures on *Google Maps*, or providing a simple list of links to flood forecast maps); some set up eyewitness sites providing photos, videos, and even live Webcam footage of the rising Brisbane river. Some such activities also incorporated information from open data resources made available by Australian governments at various levels as part of their Government 2.0 initiatives.

Many such activities also carried over – if at lower volume and visibility – into the post-flood cleanup period; here, social media have been used to provide and/or link to information on road conditions and the restoration of electrical, phone, public transport, rubbish collection, and other essential services; to advise on the availability of refugee shelters and other council facilities; to call for and organise cleanup volunteers, and provide advice on cleaning homes and salvaged household items; and to organise support for specific localities or community groups. The post-flood era has also seen a further diversification of *Twitter* hashtags, now that #qldffloods is no longer an appropriate description: alongside #bneccleanup, suburb names and other more specific hashtags have also been used to coordinate more localised activities. Similarly, on *Facebook* a wide range of pages organising donations of funds and supplies as well as coordinating various local, interstate and overseas support activities have been set up. Particular mention must be made here of the Baked Relief initiative (coordinated in part through the #bakedrelief hashtag and complementary *Facebook* page), which gathered participants from not immediately flood-affected areas in Brisbane to cook food for the volunteers helping with the flood clean-up. The success of this initiative has led to its being replicated in subsequent natural disasters, including the series of earthquakes affecting the city of Christchurch, New Zealand.

Overall, what has been particularly notable in the Queensland (and here, especially the southeast Queensland and Brisbane) flood events has been the relatively responsive structure of engagement between ‘official’ social media accounts and ‘everyday’ users – in good part stemming, no doubt, from a sense that ‘we’re all in this together’, and from the realisation that any successful flood response both during and after the acute event itself would necessarily have to rely on the broad-scale mobilisation of the Brisbane community. This sense of community, across the majority of institutional and individual participants in these social media spaces, was also maintained in significant ways by the reposting of valuable information from users on the ground by the official institutional accounts. The joint effort by the southeast Queensland community to respond to the flood threat, and the overwhelming response by local and even interstate residents to calls for cleanup volunteers (to the extent that volunteer centres were at times overloaded with

people offering to help) was not simply or predominantly a result of the social media activities which we have described here, of course – the authorities' efforts to manage the crisis through other media also played an important, and most probably more important, part. What it does point to, however, is the crucial importance of engaging with citizens through whatever channels are available, accessible, and effective – regardless of whatever communicative preferences may have existed in government organisations before the event. Indeed, one key observation to be made about the distributed, multi-channel media response to the Queensland floods is that citizens and officials *together* determined the media mix, and continued to fine-tune it as the event unfolded; the substantial shift which we have observed in the Queensland Police Service's media practices during the flood crisis provides just one key example here. This successful emergency response was also a success of e-democracy, therefore.

As Coleman & Blumler point out,

*“effective democracy depends upon governments at every level being held to account and responding to those it claims to represent. For this to happen, there need to be channels of common discourse between the official and informal political spheres.” (2009, p. 136)*

Social media provided one such channel of common discourse between Queensland citizens and their government institutions, and – with the permission and indeed with the active help and support of citizens – the various accounts of these institutions were able to place themselves in key positions within the social networks emerging around the flood crisis, but only *because* they chose to engage and respond rather than simply push out information. Only the support of other users – through retweets and other means of sharing and distributing information – provided these accounts with the social capital to guide and direct the overall community effort.

Even in spite of this generally positive assessment, however, it should also be noted that this mobilisation of community responses to the flood crisis was ultimately not entirely successful. More could have been done sooner – to protect more properties from flood damage by sandbagging them, to remove more household items from flood-threatened properties, to evacuate more residents before the flood reached Brisbane. For many residents, it seems, their trust in official advice, and their willingness to follow it, was only fully established once the flood danger was highly imminent, and any beliefs that the authorities had exaggerated the threat could no longer be sensibly sustained. Whether the heightened trust in government authorities and the spirit of collaboration and joint problem-solving which this crisis is likely to have generated will last into the future, and whether it may be mobilised again in support of other e-democracy activities, remains to be seen.

## 1.2. *WikiLeaks*

The global controversy around the *WikiLeaks* whistleblower site – and here, especially the intense attention devoted to it in the wake of its gradual publication of leaked US diplomatic cables, which started in late 2010 and is still continuing – makes for a very different case study of citizen mobilisation and participation, of course. Where in the Queensland floods case, state authorities and 'average' citizens were largely pulling together in their effort to address the flood threat and cleanup task, here a very obvious fault line emerges between government interests and citizen activities. While the online response to the Queensland floods can be seen as originating in the g2c sphere, then (with key emergency services providing vital information to citizens, and a broader network of mutual support and cooperation rapidly emerging around those central nodes, eventually approximating a g4c2c structure), in the *WikiLeaks* case activities must be characterised as predominantly involving c2c engagement, with very little direct government participation – let alone support.

Indeed, even the exact nature of the organisational structures at the centre of the *WikiLeaks* phenomenon remains nebulous, due not least to the secrecy which surrounds *WikiLeaks* as an entity itself. Media coverage especially of the 'cablegate' affair has tended to reductively identify

*WikiLeaks* mainly with its controversial founder and self-described editor-in-chief Julian Assange – perhaps exactly because in and of itself, the *WikiLeaks* organisation has remained so intangible –, but this focus on Assange (and his personal circumstances) has tended to obscure the fact that even while Assange himself was remanded in custody by British authorities on allegations of sexual assault, *WikiLeaks*' publication of US cables continued unabatedly. Evidently, then, while he remains an important figurehead and media representative for the site, *WikiLeaks*' day-to-day operation does not depend on Assange's direct involvement.

Beyond Assange himself, then, the *WikiLeaks* Website itself (and its staff) are at the centre of the c2c effort which sustains *WikiLeaks*. Founded in 2006, the site has been positioned as a safe harbour for leaked documents of various provenance, legal status, and format, usually granting immediate access to entire document collections made available to it; notably, its gradual release of the diplomatic cables since November 2010 diverts from its standard *modus operandi* – indeed, Greenwald (2010) estimates that as of December 2010, less than one percent of the total cable collection had been released publicly. Additionally, the cable release is also unusual in that *WikiLeaks* was operating in direct partnership with a number of major media organisations around the globe – chiefly, *The Guardian*, *The New York Times*, *Der Spiegel*, *Le Monde*, and *El País* – which appeared to be granted access to the cable contents before they are made public on the site itself. While little reliable information on this matter is available, we may speculate that these partnerships were designed to enable *WikiLeaks* to influence the news agenda at least to some extent, maintaining a focus on the contents of the cables rather than merely on the legal prosecution of Julian Assange.

The central position of the *WikiLeaks* site within the wider network that surrounds it is comparable to the similar positioning of other online c2c initiative sites within their respective networks, with similar implications – while such sites are able to provide some degree of leadership for the movements they aim to coordinate, they also provide a single point of failure that may threaten the overall enterprise. This became obvious in the *WikiLeaks* case in the wake of several attempts to shut down the site or undermine its operations – for example when content host Amazon Web Services (AWS) or domain name service EasyDNS withdrew their support for the site. These actions demonstrated how centrally the discoverability and availability of Websites to the wider public depends on such crucial infrastructure services, and their disabling is therefore an obvious strategy for interested parties wishing to disable a site.

However, the *WikiLeaks* case also saw a range of immediate counteractions by a loose coalition of *WikiLeaks* supporters and sympathisers, during which various alternative DNS services and content mirrors for the main *WikiLeaks* site were established across a distributed network of servers. Although beyond the scope of this paper, a useful comparison of this response to what was regarded by many supporters as a direct attack on *WikiLeaks* by government authorities, through these service providers as intermediaries, with the response to the attacks by music industry bodies on Napster (as the central point of failure of early, centrally coordinated filesharing networks) that saw the adoption of Bittorrent and similar technologies as distributed alternatives for filesharing, would be instructive: in both cases, far from disabling these networks, the attacks on their central nodes led to a rapid decentralisation of network structures which has made them more resistant to future attacks. (Similar to the music industry's focus on suing individual filesharers, the recent focus on exploring Assange's personal culpability for revealing state secrets, rather than on pursuing *WikiLeaks* as the organisation responsible for doing so, also demonstrates this shift.)

Other practical contributions to the *WikiLeaks* effort – especially in relation to the release of the diplomatic cables – include the development of various advanced tools for the searching, filtering, and processing of *WikiLeaks* contents. Writing in *Wired Magazine*, for example, Shachtman (2010) reports on new tools for visualising the progress of the Afghan War by drawing on the data contained in the Afghanistan War Logs, which *WikiLeaks* had released earlier in the year:

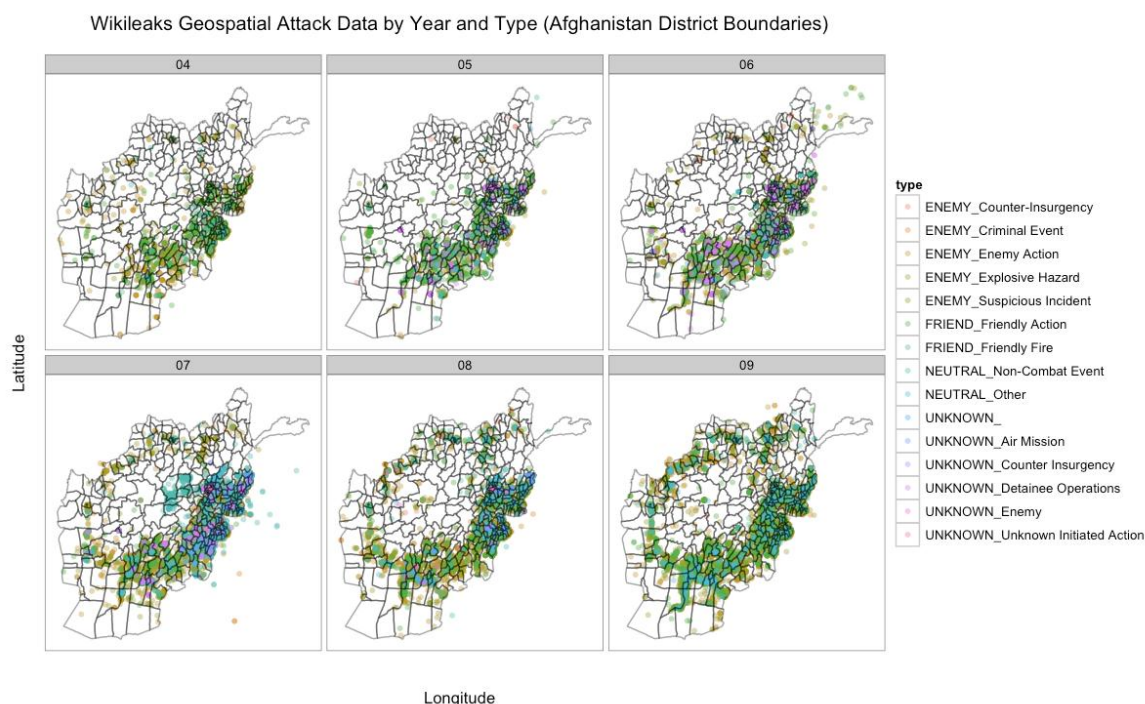


Fig. 3: Visualisation of the progress of the Afghan War, 2004-9, by Drew Conway (2010)

Such efforts also mirror similar forms of user-driven, crowdsourced processing of large public datasets elsewhere – notably, for example, *The Guardian's* harnessing of its readership in sifting through the expenses records of UK Members of Parliament, which it had obtained under Freedom of Information legislation, as part of its investigation into the parliamentary expenses scandal. Ultimately, they employ the same overall logic as do the open data initiatives – data.gov, data.gov.uk, *et al.* – which have been instituted by various governments around the world.

A very different form of community mobilisation around *WikiLeaks* is also evident in the emergence of a self-styled online guerrilla which has orchestrated coordinated attacks against a variety of entities rightly or wrongly perceived as *WikiLeaks's* 'enemies' – including, for example, Amazon Web Services and EasyDNS, as well as Paypal and Mastercard (both of which stopped the transfer of public donations to *WikiLeaks* at least temporarily). This guerrilla is led by the more militant core of Anonymous, a nebulous group of hackers, organising its activities through Internet Relay Chat and other online fora, which has a lengthy history of actions against a wide range of online targets. In support of its *WikiLeaks*-related activities, Anonymous has made available a public toolset that allows everyday sympathisers of *WikiLeaks* to participate in coordinated Distributed Denial of Service (DDoS) attacks – a well-known method for overloading Web servers with page requests, thereby causing them to crash and their hosted Websites to be unavailable.

More broadly, efforts in support of *WikiLeaks* range from such drastic activist interventions – which could be characterised as electronic warfare, but also as an online equivalent of picketing businesses – to more conventional forms of showing support: the establishment of online and offline support groups, public rallies, and financial donations to fund both *WikiLeaks* as such and Assange's legal defence in particular. Especially the latter activities have also attracted a number of celebrity supporters – from lawyer Geoffrey Robertson, who is supporting Assange's defence team, to filmmaker Michael Moore. Additionally, social media have also been used in significant ways to distribute information about *WikiLeaks'* (and its opponents') activities and Assange's legal case, well beyond (and to some extent in direct response to) their mainstream journalistic coverage. The use of both *Facebook* and *Twitter* by a large and diverse community of interested users to share information about these issues demonstrates the role of these social media

platforms in facilitating what Hermida has described as “ambient journalism”: “a multi-faceted and fragmented news experience, where citizens are producing small pieces of content that can be collectively considered as journalism. ... In this sense, Twitter becomes part of an ambient media system where users receive a flow of information from both established media and from each other” (2010).

However we might assess the social utility of *WikiLeaks*’ core activities, then, it becomes clear that along with the support movement which it has managed to generate, the site can be seen as an example of a successful c2c e-democracy initiative – whose closest parallels amongst ‘accepted’ e-democracy projects are, perhaps, initiatives such as *MoveOn* in the US or *GetUp* in Australia. Such projects utilise their central Websites as rallying points for citizen engagement and activism, as well as to ask for donations and other expressions of support; they provide the tools for their members and sympathisers to organise online and offline activities in support of specific causes, as well as for seeking and collating the information available from open datasets; and they encourage the formation of self-sustaining spin-off groups and initiatives well beyond the core site itself. They are, in other words, aiming to maximise the distribution of their messages by encouraging the development of a distributed, multi-channel, multi-platform, self-organising network of supporters and participants – a network which, in *WikiLeaks*’ case, also minimises the risk of technological failure. Additionally, they seek the endorsement of celebrity champions and partnerships with media organisations in order to gain greater authority and maximise the dissemination of their messages – but this media exposure, which draws attention to spokespeople and other leaders, can also threaten to undermine the largely bottom-up organisation of the project.

Similarly, like these activist organisations, *WikiLeaks*, too – if we take its statements at face value – aims to affect the political process by encouraging public discussion and debate on a strong evidential basis. Its mission statement directly links the leaking of secret information to the idea of open government:

*“The power of principled leaking to call governments, corporations and institutions to account is amply demonstrated through recent history. The public scrutiny of otherwise unaccountable and secretive institutions forces them to consider the ethical implications of their actions. ... Open government answers injustice rather than causing it. Open government exposes and undoes corruption. Open governance is the most effective method of promoting good governance.”* (WikiLeaks, 2010)

Indeed, some suggest (perhaps overenthusiastically) that the site’s coverage of the political situation in Tunisia served as an immediate catalyst for the fall of that country’s autocratic regime in early 2011, making this “the first *WikiLeaks* revolution” (Dickinson, 2011).

*WikiLeaks*’ success in generating such substantial attention and support – surpassing many more conventional activist organisations – must certainly be attributed in good part to its alternatively fearless or reckless publication of state secrets and concomitant attitude towards government and corporate authorities. Compared to *MoveOn* or *GetUp*, for example, which have various personal and organisational ties to the political establishment in their home countries, *WikiLeaks* is positioned far more clearly outside the system, and this ‘outlaw’ status (also carefully cultivated by Assange himself) surely adds to the site’s public appeal, even to the point of romanticisation. However, it also mirrors the disenchantment with ‘politics as usual’ that is notable in many western democracies (as well as, it goes without saying, in most autocratic regimes). Statements about *WikiLeaks* by various political leaders only strengthen this position – so, for example, public sentiment towards *WikiLeaks* in Australia, where only 19% of the population support prosecuting Julian Assange for the US cable leaks (Lester, 2011), diverges fundamentally from the views of Prime Minister Julia Gillard, who labelled Assange’s actions as “grossly irresponsible” and “illegal” (*ABC News Online*, 2010) – let alone from those of US Vice President Joe Biden, who called Assange a “high-tech terrorist” (MacAskill, 2010).

This significant difference in appraising *WikiLeaks*’ (and Assange’s) actions may also contribute to making participation in supporting the site more attractive for ‘average’ citizens: it may confer a

genuine sense of ‘fighting the system’ by discovering, reading through, sharing, or otherwise processing the hitherto hidden information which *WikiLeaks* has made available – however banal and inconsequential its actual contents may in fact turn out to be. Again, the same dynamic was likely also at play for participants in *The Guardian’s* MPs’ expenses crowdsourcing project. Additionally, of course, the highly controversial nature of *WikiLeaks* is also designed to maximise its media exposure, which in turn again improves its chances of attracting participants. Other c2c e-democracy projects, which may employ considerably safer strategies that are designed to challenge but not fundamentally offend the overall political system, may fail to garner as much media and popular attention – from this perspective, then, *WikiLeaks* could also be seen as another step in a continuing radicalisation of politics, however. (In this context, it should be noted that while the eventual falling-out between *WikiLeaks* and its publishing partners was caused by a complex range of factors, including personal animosities and highly divergent work practices, the dissolution of these partnerships also does leave *WikiLeaks* free to pursue a more radical agenda again.)

The palpable (and possibly growing) mistrust of politicians, governments, and the media which can today be observed in many nations may give rise to two different tendencies, then – on the one hand, a rise in radical opposition to established political frameworks (as also embodied by fringe groups such as the US Tea Party movement or the UK Independence Party, for example); and on the other hand, a growing popular demand for greater transparency in political decision-making. The latter demand is addressed, more or less enthusiastically, by a number of governments through ‘open data’ and ‘Government 2.0’ initiatives, but – especially where such initiatives are limited or altogether fail to eventuate – has also given rise to the emergence of the ‘leak’ as a standard mode of public communication (Bieber, 2010): both examples of a development towards “transparency tyranny” which *Trendwatching.com* first identified for corporate information (2007).

*WikiLeaks*, then, combines these two tendencies by instituting a kind of radical transparency tyranny which, building on a wide and diverse network of supporters and operating mainly through distributed, bottom-up, c2c structures, advances well beyond the delimited and controlled experiments in open data that have been established as top-down, g2c services. Its deliberate distance from and opposition to state institutions – indeed, to state institutions around the world, to such an extent that it has been possible for Rosen to describe *WikiLeaks* as “the world’s first stateless news organization” (2010) – has protected the site from government retribution and censorship (as Rosen also notes, “Wikileaks is organized so that if the crackdown comes in one country, the servers can be switched on in another”), but has also made it virtually impossible for any more constructive dialogue between citizens and official authorities to be conducted through the site. In fact, the radicalisation of some of *WikiLeaks’* supporters – chiefly, the online guerrilla forming around the Anonymous activists – makes it difficult to assess whether even *WikiLeaks* itself, and Julian Assange as its nominal leader, are still in control of the dynamic which they have set in motion. The network surrounding *WikiLeaks* may have become too distributed, too decentralised.

Even so, an eventual transition from *WikiLeaks’* radical-oppositional c2c activism stance towards a more constructive g4c2c model that does involve some government participation still does not seem altogether impossible – if at present highly improbable. The most obvious move in this direction is the approval of the Icelandic Modern Media Initiative (IMMI) by the Alþingi, the Parliament of Iceland (where public opinion and support has been especially positively disposed towards *WikiLeaks* for some time now) – it requires “the government to introduce a new legislative regime to protect and strengthen modern freedom of expression, and the free flow of information in Iceland and around the world” (IMMI, 2011). Indeed, *WikiLeaks* representatives were directly involved in developing the IMMI legislation, and a company related to *WikiLeaks* has now been founded in Iceland (*IceNews*, 2010).

If realised in practice, initiatives such as IMMI may be able to rescue *WikiLeaks* from its status as a pariah and outlaw outside the social compact and legal frameworks of society, by changing that compact itself and the laws which flow from it, and would thereby enable governments to

engage with the organisation and its followers through other than defensive and punitive measures. An official sanctioning of *WikiLeaks* watchdog activities – however unorthodox they may be by our current standards – would have an effect similar to previous whistleblower protection laws which cover journalistic publications, but on a much wider, societal scale.

As Stephen Coleman notes, while “the framing of 20th- century politics by broadcast media led to a sense that democracy amounted to the public watching and listening to the political elite thinking aloud on its behalf”, the participative online space of Web 2.0 “opens up unprecedented opportunities for more inclusive public engagement in the deliberation of policy issues” (Coleman, 2005b, p. 209). Conversely, if a gradual legitimisation of *WikiLeaks* – through the IMMI project or other similar initiatives – turns out to be unable to be achieved, it is very likely that in spite of its popular support, the site will increasingly be dismissed as a simply disruptive factor which claims to work towards a better future, but fails to engage with those political actors who pursue similar goals from within the establishment. Such patterns are familiar from previous political upstart movements which failed to convert their initial *ad hoc* support into a long-term strategic mobilisation of supporters.

## 2. Lessons from *WikiLeaks* and the Queensland Floods

There are a great number of current ‘e-democracy’ and ‘Government 2.0’ initiatives around the world, many of which pursue goals such as those articulated by the Australian federal government’s Government 2.0 Task Force:

- *“enhancing government by making our democracy more participatory and informed;*
- *improving the quality and responsiveness of service delivery, enabling them to become more agile and responsive to users and communities;*
- *cultivating and harnessing the enthusiasm of citizens, and allowing users of government services greater participation in the design and continuous improvement of public services;*
- *unlocking the economic and social value of public information as a platform for innovation;*
- *making public sector agencies more responsive to people’s needs and concerns; and*
- *involving communities of interest and practice outside of the public sector in providing diverse expertise, perspectives and input into policy making and policy networks.” (2009, p. xi-xii)*

The two case studies examined here, however, demonstrate that in pursuing these goals it is useful not only to look to the tried-and-tested approaches for building new Websites for government-to-citizen or citizen-to-citizen engagement, but also to analyse the rapid *ad hoc* forms of participatory organisation which are forged in a more distributed fashion during acute events, in the waters of a major natural disaster or the fires of a global political controversy. What we can observe in the Queensland floods and the *WikiLeaks* initiative is a largely intuitive and very speedy transformation of extant, inherited structures – respectively, of g2c information provision and c2c political activism – to address the emerging requirements of urgent communicative crises: a transformation which in both cases trends towards the g4c2c model (even if in the case of *WikiLeaks*, especially, a great many hurdles have yet to be overcome). The acuteness of each event serves as catalyst and accelerator for this transformation.

Several specific lessons arise from these two cases (also cf. Bruns & Bahnisch, 2009):

### 2.1. Low Hurdles to Participation

Participation in the initiative by potential supporters is maximised if the hurdles to participation are kept as low as possible. In the case of the Queensland floods, while the Queensland Police Service was able to use *Facebook* to post more detailed and complex messages about the current situation, it was *Twitter* with its far more basic communicative infrastructure – where public messages are inherently accessible to all users, and hashtags can be used as a simple and effective tool for conducting a collective discussion even without a need for users to be followers of one another – which was substantially more useful for disseminating these messages. Additionally, attempts to complicate the system – for example through the introduction of a more complex hashtag system, beyond #qldfloods and #thebigwet – failed: this represents a clear (if tacit) exhortation to everyone concerned to keep things simple. *Twitter* is used in similar ways to support and share information about *WikiLeaks*, of course – and in this case, for better or for worse, even participation in acts as previously difficult as orchestrating a DDoS attack against perceived enemies is made possible for ‘average’ users, simply by downloading the necessary software.

### 2.2. Distribute across Multiple Platforms

Both cases also demonstrate the importance of relying on more than a single point of access (and thus, a single point of failure) for effective engagement – especially during moments of crisis, of course. Both the key information sites during the Queensland floods and the *WikiLeaks* site were multiply mirrored, on an *ad hoc* basis, by other participants in order to ensure that a single server failure or shutdown cannot bring down the entire network of activities. Similarly, the use of a variety of other communications platforms – again including *Facebook* and *Twitter* as key components, of course, but also the various mainstream media channels used during the floods or acting in partnership with *WikiLeaks* – also enabled potential participants to engage in ways which suited their own communicative preferences. However, this multiplatform approach also necessarily dilutes the overall message, of course – making it important to be able to respond quickly across the different platforms, too (as in the case of the Queensland Police Service’s #Mythbuster updates).

### 2.3. Generate a Sense of Community

Even across the different platforms which may be in use, it nonetheless remains important to ensure a sense of common aims and intentions. This is most easily possible in the face of a common enemy, of course – the floods, or ‘the political establishment’, in our two case studies –, but more generally, too, especially where government or other authorities are involved in citizen engagement activities it is important to avoid a ‘citizens vs. authorities’ stance at any cost. What takes place here is “the pursuit of self-organising, reflexive, common purpose among voluntary co-subjects, who learn about each other and about the state of play of their interests ... [and] the emergence of media citizenship” (Hartley, 2010). This, of course, is also an important argument in favour of the more *intermediate* government participation of g4c2c models (where authorities participate in, but do not own the conversation) over g2c models (where there is a more *immediate*, linear connection between citizens and government).

### 2.4. Allow Community Development

Crucial to the development of both case studies examined here was the relative autonomy of distributed participant communities in relation to the participating institutional authorities (such as emergency services, or the *WikiLeaks* leadership group itself). So, for example, it was the wider *Twitter* community which settled on #qldfloods as the predominant hashtag for discussing and disseminating flood-related information – and this hashtag was subsequently adopted by the QPS and other emergency services, as well as participating media organisations, for their own tweets, too. This requires the constant observation of what the wider community of participants are doing in



their own participative practice, rather than the more detached presence of authorities who see their role as mainly providing information to the community, through channels of their own choice; it also requires the acknowledgement, and possibly the rewarding, of valuable contributions and contributors in the community. On the other hand, an overly hands-off approach to the community, as we see practiced by *WikiLeaks* staff, may result in community dynamics slipping out of reach – leading, for example, to the kind of uncontrolled guerrilla cyber-warfare which is practiced by the Anonymous group and its sympathisers in the name of, but outside the control of *WikiLeaks* itself.

## 2.5. Earn Social Capital

What immediately follows from the preceding point is that in the community-driven, distributed social media environments we have described here, social capital is earned, not inherited, even by those participants acting on behalf of established authorities. The reason that those tweeting and posting *Facebook* updates on behalf of the Queensland Police Service were respected by the wider social media community following the Queensland flood events was not the inherent status of the Queensland Police force in Australian society, nor even perhaps the flood rescue and relief activities performed by police officers in the field, but the way that the QPS *Twitter* and *Facebook* accounts themselves performed: as valuable sources of information; as quick, informative, and level-headed respondents taking part in the community discussion; and as fellow, equal members of both online and local communities. Mere reliance on the overall social clout associated with the police service badge would not have produced comparable results.

These, then, are key lessons which it would also benefit other e-democracy initiatives to learn. What remains an open question, by contrast, is the extent to which the nature of these two case studies as focussed around acute events has influenced their outcomes. By definition, acute events are *acute*: they focus popular attention and attract potentially large communities of participants and contributors, at least for the duration of the event itself. This is necessarily different for e-democracy initiatives whose themes and topics are less inherently problematic or controversial, and/or unfold over a much longer period of time; here, there could be legitimate fears that too much distribution and dispersion of the community of participants across diverse platforms and spaces could dilute key community-sustaining processes themselves. However, neither the size of the participant community, nor spatial, temporal or topical concentration, are inherent guarantees for the success of a citizen engagement project – smaller-scale issues whose timelines are less pressing may comfortably be debated by a smaller number of contributors over a longer period of time, without necessarily generating outcomes that are any less productive. The five key lessons identified above, at any rate, are not time-, topic-, or community-specific.

At the same time, however, it may be useful to consider the possibility that citizen engagement activities in e-democracy projects could be explicitly organised around a series of (at least moderately) acute events – to position and highlight key issues and questions as challenges for the community in order to concentrate debate and deliberation. Clearly, these would not be as monumental as the acute events we have observed here, but even on a much smaller scale this enhanced focus may be helpful. Such an organisation cannot be attempted without consultation with the community itself, however, and without taking place in the spaces preferred by the community, as any perceptions of artificial, top-down interventions by site operators must be avoided in order to maintain the g4c2c approach. Should this ‘acute events’ approach be possible, then, it seems likely that it would generate a better quality of citizen engagement than merely thematically organised approaches to e-democracy that force participants to sign up to centralised spaces.

## References

- ABC News Online. (2010). Gillard Fires at 'Illegal' WikiLeaks Dump. 2 Dec. 2010. Retrieved 21 Jan. 2011 from <http://www.abc.net.au/news/stories/2010/12/02/3082522.htm>.
- Baym, Nancy K. (2000). *Tune In, Log On: Soaps, Fandom, and Online Community*. Thousand Oaks, Calif.: Sage.
- Bieber, Christoph. (2010). Wikileaks und offene Daten – zwei Seiten einer Medaille? *Zeit Online*, 1 Dec. 2010. Retrieved 21 Jan. 2011 from [http://blog.zeit.de/politik-nach-zahlen/2010/12/01/wikileaks-und-offene-daten-%E2%80%93-zwei-seiten-einer-medaille\\_2686](http://blog.zeit.de/politik-nach-zahlen/2010/12/01/wikileaks-und-offene-daten-%E2%80%93-zwei-seiten-einer-medaille_2686).
- Blumler, Jay G., and Stephen Coleman. (2001). *Realising Democracy Online: A Civic Commons in Cyberspace*. London: Institute for Public Policy Research. Retrieved 21 Jan. 2011 from [http://www.gov2u.org/publications/10\\_coleman-realising%20democracy.pdf](http://www.gov2u.org/publications/10_coleman-realising%20democracy.pdf).
- Bruns, Axel. (2008). *Blogs, Wikipedia, Second Life, and Beyond: From Production to Produsage*. New York: Peter Lang.
- . (2009). *Social Media Volume 2 – User Engagement Strategies*. Sydney: Smart Services CRC.
- . (2011). The Queensland Floods on Twitter: A Brief First Look. *Mapping Online Publics*, 17 Jan. 2011. Retrieved 21 Jan. 2011 from <http://www.mappingonlinepublics.net/2011/01/17/the-queensland-floods-on-twitter-a-brief-first-look/>.
- , and Jean Burgess. (2011) The Use of Twitter Hashtags in the Formation of *Ad Hoc* Publics. Paper presented at the European Consortium for Political Research conference, Reykjavik, 26 Aug. 2011. Retrieved 17 Nov. 2012 from [http://snurb.info/files/2011/The%20Use%20of%20Twitter%20Hashtags%20in%20the%20Formation%20of%20Ad%20Hoc%20Publics%20\(final\).pdf](http://snurb.info/files/2011/The%20Use%20of%20Twitter%20Hashtags%20in%20the%20Formation%20of%20Ad%20Hoc%20Publics%20(final).pdf).
- , and Adam Swift. (2010). g4c2c: Enabling Citizen Engagement at Arms' Length from Government. *EDEM 2010: Proceedings of the 4th International Conference on E-Democracy*, Krems, Austria, 6-7 May 2010, eds. Peter Parycek and Alexander Prosser. Krems, Austria: Österreichische Computer Gesellschaft.
- , and Mark Bahnisch. (2009). *Social Media Volume 1 – State of the Art*. Sydney: Smart Services CRC.
- , Jean Burgess, Kate Crawford, and Frances Shaw. (2012) *#qldfloods and @QPSMedia: Crisis Communication on Twitter in the 2011 South East Queensland Floods*. Brisbane: ARC Centre of Excellence for Creative Industries and Innovation, 2012. Retrieved 17 Nov. 2012 from <http://cci.edu.au/floodsreport.pdf>.
- Burgess, Jean. (2010). Remembering Black Saturday: The Role of Personal Communicative Ecologies in the Mediation of the 2009 Australian Bushfires. Paper presented at ACS Crossroads conference, Hong Kong, June 2010.
- Coleman, Stephen. (2005a). The Lonely Citizen: Indirect Representation in an Age of Networks. *Political Communication* 22(2): 197- 214.
- . (2005b). New Mediation and Direct Representation: Reconceptualizing Representation in the Digital Age. *New Media and Society* 7(2): 177-98.
- , and Jay G. Blumler. (2009). *The Internet and Democratic Citizenship: Theory, Practice and Policy*. Cambridge: Cambridge UP.
- Conway, Drew. (2010). Wikileaks Geospatial Attack Data by Year and Type (Afghan District Boundaries). *GitHub: Social Coding*, 2 Sep. 2010. Retrieved 21 Jan. 2011 from [https://github.com/drewconway/WikiLeaks\\_Analysis/blob/master/images/events\\_by\\_year\\_map.png](https://github.com/drewconway/WikiLeaks_Analysis/blob/master/images/events_by_year_map.png).
- Dickinson, Elizabeth. (2011). The First WikiLeaks Revolution? *Foreign Policy*, 13 Jan. 2011. Retrieved 21 Jan. 2011 from [http://wikileaks.foreignpolicy.com/posts/2011/01/13/wikileaks\\_and\\_the\\_tunisia\\_protests?sms\\_ss=twitter&at\\_xt=4d2fb\\_d11812912cc.0](http://wikileaks.foreignpolicy.com/posts/2011/01/13/wikileaks_and_the_tunisia_protests?sms_ss=twitter&at_xt=4d2fb_d11812912cc.0).
- Government 2.0 Task Force. (2009). *Engage: Getting on with Government 2.0*. Retrieved 21 Jan. 2011 from <http://www.finance.gov.au/publications/gov20taskforcereport/doc/Government20TaskforceReport.pdf>.
- Greenwald, Glenn. (2010). The Media's Authoritarianism and WikiLeaks. *Salon*, 10 Dec. 2010. Retrieved 21 Jan. 2011 from [http://www.salon.com/news/opinion/glenn\\_greenwald/2010/12/10/wikileaks\\_media/](http://www.salon.com/news/opinion/glenn_greenwald/2010/12/10/wikileaks_media/).
- Hartley, John (2010). Silly Citizenship. *Critical Discourse Studies* 7(4).
- Hebdige, Dick. (1979). *Subculture: The Meaning of Style*. New ed. London: Routledge.
- Hermida, Alfred. (2010). From TV to Twitter: How Ambient News Became Ambient Journalism. *M/C Journal* 13(2). Retrieved 21 Jan. 2011 from <http://journal.media-culture.org.au/index.php/mcjournal/article/view/220>.
- Icelandic Modern Media Initiative [IMMI]. (2011). Iceland to Become International Transparency Haven. Retrieved 21 Jan. 2011 from <http://immi.is/?l=en>.
- IceNews. (2010). Wikileaks Starts Company in Icelandic Apartment. 13 Nov. 2010. Retrieved 21 Jan. 2011 from <http://www.icenews.is/index.php/2010/11/13/wikileaks-starts-company-in-icelandic-apartment/>.

- Lester, Tim. (2011). Most Back WikiLeaks and Oppose Prosecution. *Brisbane Times*, 6 Jan. 2011. Retrieved 21 Jan. 2011 from <http://www.brisbanetimes.com.au/technology/technology-news/most-back-wikileaks-and-oppose-prosecution-20110105-19gb1.html>.
- MacAskill, Ewen. (2010). Julian Assange like a Hi-Tech Terrorist, Says Joe Biden. *The Guardian*, 19 Dec. 2010. Retrieved 21 Jan. 2011 from <http://www.guardian.co.uk/media/2010/dec/19/assange-high-tech-terrorist-biden>.
- Noelle-Neumann, Elisabeth. (1974). The Spiral of Silence: A Theory of Public Opinion. *Journal of Communication* 24(2), pp. 43-51.
- Rosen, Jay. (2010). The Afghanistan War Logs Released by Wikileaks, the World's First Stateless News Organization. *PressThink*, 26 July 2010. Retrieved 21 Jan. 2011 from [http://archive.prssthink.org/2010/07/26/wikileaks\\_afghan.html](http://archive.prssthink.org/2010/07/26/wikileaks_afghan.html).
- Shachtman, Noah. (2010). Open Source Tools Turn WikiLeaks into Illustrated Afghan Meltdown. *Wired: Danger Room*, 9 Aug. 2010. Retrieved 21 Jan. 2011 from <http://www.wired.com/dangerroom/?p=29209>.
- Trendwatching.com*. (2007). Transparency Tyranny. Retrieved 21 Jan. 2011 from [http://trendwatching.com/trends/pdf/2007\\_05\\_transparency.pdf](http://trendwatching.com/trends/pdf/2007_05_transparency.pdf).
- WikiLeaks*. (2011). What Is WikiLeaks? Retrieved 21 Jan. 2011 from <http://www.wikileaks.ch/About.html>.

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